Amendments to the Claims:

Claims 1-17 (Canceled)

Claim 18 (New): A vascular filter, comprising:

an expandable filter body configured to be implanted in a blood vessel; and

an agitation member movably coupled to the filter body;

wherein the agitation member is adapted to break apart particles captured within the filter body.

Claim 19 (New): The vascular filter of claim 18, wherein the agitation member is located substantially within an interior volume of the filter body.

Claim 20 (New): The vascular filter of claim 18, further comprising a flow-receiving member for causing the agitation member to rotate relative to the filter body.

Claim 21 (New): The vascular filter of claim 20, wherein the agitation member is configured to reverse direction.

Claim 22 (New): The vascular filter of claim 18, further comprising an elongate drive mechanism configured for removable attachment to the agitation member for causing the agitation member to rotate.

Claim 23 (New): The vascular filter of claim 18, further comprising a clutch mechanism such that the agitation member moves relative to the filter body only when a particle is trapped within the filter body.

Claim 24 (New): The vascular filter of claim 18, further comprising an energy storage device for causing the agitation member to rotate.

Claim 25 (New): The vascular filter of claim 24, further comprising an electronic sensor for detecting the presence of particles within the filter body.

Claim 26 (New): The vascular filter of claim 18, wherein the agitation member is configured to vibrate for breaking apart the particle.

Claim 27 (New): The vascular filter of claim 26, wherein the agitation member vibrates at ultrasonic frequencies.

Claim 28 (New): The vascular filter of claim 27, further comprising an energy storage device coupled to the filter body for producing movement of the agitation member.

Claim 29 (New): The vascular filter of claim 18, wherein the agitation member emits a pressurized fluid flow.

Claim 30 (New): The vascular filter of claim 18, further comprising an aspiration catheter for aspirating particles.

Claim 31 (New): An implantable device configured to capture and macerate emboli within a blood vessel, comprising:

an expandable filter body configured to be implanted in a blood vessel;

an agitation member located substantially within an interior volume of the filter body; and

a drive mechanism for rotating the agitation member with respect to the filter body;

wherein the agitation member is configured to macerate emboli captured within the filter body.

Claim 32 (New): The implantable device of claim 31, wherein the drive mechanism comprises an impeller configured to be rotated by blood flowing through the blood vessel.

Claim 33 (New): The implantable device of claim 31, wherein the drive mechanism comprises an elongate drive catheter coupled to the agitation member.

Claim 34 (New): The implantable device of claim 33, further comprising an aspiration catheter configured for advancement along the elongate drive catheter.

Claim 35 (New): The implantable device of claim 31, wherein the drive mechanism comprises an energy storage device coupled to the agitation member.

Claim 36 (New): A device configured to improve blood flow through a blood vessel, comprising:

an expandable filter body configured to engage an inner wall of a blood vessel;

an agitation member rotatably coupled to the filter body; and

a drive mechanism for rotating the agitation member with respect to the filter body;

wherein the agitation member is advanceable relative to the filter body for breaking apart occlusive material within the blood vessel and wherein the filter body is configured to capture particles of the occlusive material.

Claim 37 (New): The device of claim 36, further comprising an aspiration catheter configured for advancement over the drive catheter.